

5. PROGRAM INTEGRATION

5.1 SCOPE

Program Integration activities include Quality Assurance (QA), Systems Integration and Regulatory Compliance represented as Program Management and Integration (PM&I), and Human Resources and Administration. Program Integration activities that are outside of the OCRWM budget and are funded from the Nuclear Waste Fund (NWF) include NRC costs, the NWTRB, and costs for the defunct office of the Nuclear Waste Negotiator (NWN).

5.1.1 Quality Assurance

The OCRWM program maintains a mandatory QA program to identify and ensure implementation of requirements that protect the health and safety of the public, workers, and the environment. The QA program must meet NRC requirements. Extensive development and review of technical and implementation documentation, as well as effective implementation of the requirements, will be necessary to ensure sound data and engineering, and to support eventual licensing of facilities by the NRC. Through QA audits, the QA program independently verifies that the various designs and scientific activities incorporate the necessary regulatory requirements. The QA program includes work scope related to providing QA program management advice and planning, establishing and maintaining the OCRWM QA program and implementing procedures, and conducting QA verification activities. QA activities are assumed to continue through closure and decommissioning of the repository in 2069 for Case 1 and 2144 for Case 2.

5.1.2 Program Management and Integration

PM&I activities support the Program Director in communicating program policy to key audiences internal and external to the DOE, and in articulating the rationale for strategy and plan changes to program stakeholders. Support is provided for the Program Director's interactions with Congress and the Office of Management and Budget (OMB) during the appropriations process. PM&I staff also support interactions with the NWTRB in its independent evaluation of the program's technical and scientific activities.

PM&I has five areas of work: Systems Engineering and Integration, Regulatory Compliance, Planning, International Waste Management Technology, and Program Control. The costs for the salaries, travel expenditures, and overhead charges of Federal employees who support the OCRWM program, located at all sites, are included in the PM&I cost estimate.

Future PM&I costs are projected to decrease relative to historical costs for this element. There is a high integration component during the D&E phase of the program. Program Integration costs are expected to decrease as the program proceeds with implementation, and will be significantly reduced during the monitoring phase.

5.1.3 Human Resources and Administration

Human Resources and Administration manages a diverse set of personnel development, communication, financial, and information management programs. These include QA training for headquarters personnel, submittal of the Annual Report to Congress, management of the NWF investment portfolio, public information and education activities, administration of scholarship programs, and implementation of information management systems.

5.1.4 Nuclear Regulatory Commission Costs

NRC costs cover that agency's operating costs for participating in the CRWMS Program. Funds for NRC activities that support the program are appropriated separately by Congress as part of the NRC budget rather than the DOE budget. The CRWMS portion of the NRC budget is paid from the NWF. Consequently, NRC costs are included in the TSLCC analysis. NRC costs began in 1989 and are assumed to continue through closure and decommissioning of the repository in 2069 for Case 1 and 2144 for Case 2.

5.1.5 Nuclear Waste Technical Review Board

The costs for the NWTRB cover the formation and operation of an independent establishment in the Executive branch of government. The Board, consisting of 11 members appointed by the President, evaluates the technical and scientific validity of the activities undertaken by the Secretary of Energy. Funds for the Board's activities are appropriated from the NWF. The Board's activities began in 1990 and are assumed to continue through receipt of SNF at the repository in 2010.

5.1.6 Nuclear Waste Negotiator

The costs for the Office of the Nuclear Waste Negotiator covered the formation and operation of an independent establishment within the Executive branch of government. The Negotiator, appointed by the President, attempted to find a state or Indian tribe willing to host a Monitored Retrievable Storage (MRS) facility at a technically qualified site. The funds for these activities were appropriated from the NWF. The Negotiator's activities began in 1990 and were terminated in 1995.

5.2 ASSUMPTIONS

The only changes to the Program Integration estimate from the 1998 TSLCC are the use of FY 1998 actual costs (CRWMS M&O 1999b) and the FY 2000 budget request (Barrett, L.H. 1999).

5.3 COST

Table 20 summarizes Program Integration costs. The Program Integration costs have not changed significantly from the 1998 TSLCC estimate.

Table 20. Program Integration Costs (in Millions of 1999\$)

Cost Element	Historical (1983-1999)	Case 1 Future Costs (2000-2069)	Case 2 Future Costs (2000-2144)
Program Management & Administration	1,290	1,820	2,210
Quality Assurance	110	560	560
Program Management & Integration	1,010	1,050	1,370
Human Resources & Administration	170	210	280
Non-OCRWM NWF Costs	300	320	400
Nuclear Regulatory Commission	260	290	370
Nuclear Waste Technical Review Board	25	27	27
Nuclear Waste Negotiator	10	0	0
Total	1,590	2,140	2,610

NOTE: Historical costs total \$1.3 Billion in YOE dollars; the 1999 historical costs are an estimate.

INTENTIONALLY LEFT BLANK